Permit to Operate

FACILITY: S-1549 EXPIRATION DATE: 05/31/200

LEGAL OWNER OR OPERATOR: MCFARLAND ENERGY INC

MAILING ADDRESS: BOX 5197 X

BAKERSFIELD, CA 93388

FACILITY LOCATION: HEAVY OIL WESTERN

KERN COUNTY, CA

FACILITY DESCRIPTION: HEAVY OIL PRODUCTION

The Facility to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

The Permit to Opertae remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

DAVID L. CROW

Executive Director / APCO

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Diector of Permit Services

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-0-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

- 1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)], [Federally Enforceable Through Title V]
- 2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)], [Federally Enforceable Through Title V]
- 3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0], [Federally Enforceable Through Title V]
- 4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (Amended September 17, 1998). [District Rules 2010, 3.0 and 4.0; and 2020], [Federally Enforceable Through Title V]
- 5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1], [Federally Enforceable Through Title V]
- 6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031], [Federally Enforceable Through Title V]
- 7. Every application for a permit required under Rule 2010 (12/17/92) (Permits Required) shall be filed in a manner and form prescribed by the District. [District Rule 2040], [Federally Enforceable Through Title V]
- 8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.5.1], [Federally Enforceable Through Title V]
- 9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
- 10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.6.1], [Federally Enforceable Through Title V]
- 11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520(6/15/95) [District Rules 2520, 9.6.2 and 1100, 7.0], [Federally Enforceable Through Title V]
- 12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.8], [Federally Enforceable Through Title V]

- 13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.9.2], [Federally Enforceable Through Title V]
- 14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.9.3], [Federally Enforceable Through Title V]
- 15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.9.4], [Federally Enforceable Through Title V]
- 16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.9.5], [Federally Enforceable Through Title V]
- 17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.10], [Federally Enforceable Through Title V]
- 18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.14.2.1], [Federally Enforceable Through Title V]
- 19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.14.2.2], [Federally Enforceable Through Title V]
- 20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.14.2.3], [Federally Enforceable Through Title V]
- 21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.14.2.4], [Federally Enforceable Through Title V]
- 22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (12/17/92), by using EPA method 9. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)], [Federally Enforceable Through Title V]
- 23. No person shall supply, sell, solicit or apply any architectural coating, except specialty coatings, that contains more than 250 grams of VOC per liter of coating (less water and exempt compounds, and excluding any colorant added to tint bases), or manufacture, blend, or repackage such coating with more than 250 grams of VOC per liter (less water and exempt compounds, and excluding any colorant added to tint bases) for use within the District. [District Rule 4601, 5.1], [Federally Enforceable Through Title V]
- 24. Specialty Coating Limitations: No person shall apply, sell, solicit, or offer for sale any architectural coating listed in the Tables of Standards (District Rule 4601, Table 1 and Table 2), nor manufacture, blend, or repackage such coating for use within the District, which contains VOCs in excess of the specified limits after the corresponding date listed in Table 1(grams of VOC per liter of coating as applied less water and exempt compounds, excluding any colorant added to tint bases) and in Table 2 (grams of VOC per liter of material), except as provided in Section 5.3 of Rule 4601. [District Rule 4601, 5.2], [Federally Enforceable Through Title V]
- 25. All VOC-containing materials shall be stored in closed containers when not in use. In use includes, but is not limited to: being accessed, filled, emptied, maintained or repaired. [District Rule 4601, 5.4], [Federally Enforceable Through Title V]
- 26. A person shall not use VOCs for the cleanup of spray equipment unless equipment for collection of the cleaning compounds and minimizing its evaporation to the atmosphere is used. [District Rule 4601, 5.5], [Federally Enforceable Through Title V]
- 27. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.2 (12/17/92). [District Rule 4601, 6.1 and 6.2], [Federally Enforceable Through Title V]
- 28. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.14.1and 10.0], [Federally Enforceable Through Title V]
- 29. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F], [Federally Enforceable Through Title V]
- 30. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, [Federally Enforceable Through Title V]

- 31. Disturbances of soil related to any construction, demolition, excavation, extraction, or water mining activities shall comply with the requirements for fugitive dust control in SJVUAPCD District Rule 8020 (4/25/96) unless specifically exempted under section 4 of Rule 8020 (4/25/96). [District Rule 8020], [Federally Enforceable Through Title V]
- 32. Outdoor handling and storage of any bulk material which emits dust shall comply with the requirements of SJVUAPCD Rule 8030 (4/25/96), unless specifically exempted under section 4 of Rule 8030 (4/25/96). [District Rule 8030], [Federally Enforceable Through Title V]
- 33. Any paved road over 3 miles in length, and any unpaved roads over half a mile in length, constructed after December 10, 1993 shall use the design criteria and dust control measures of, and comply with the administrative requirements of, SJVUAPCD Rule 8060 (4/25/96) unless specifically exempted under section 4 of Rule 8060 (4/25/96). [District Rule 8060], [Federally Enforceable Through Title V]
- 34. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M], [Federally Enforceable Through Title V]
- 35. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.17], [Federally Enforceable Through Title V]
- 36. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2], [Federally Enforceable Through Title V]
- 37. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permit shall apply. [District Rule 2520, 9.1.1], [Federally Enforceable Through Title V]
- 38. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (12/17/92); 4601, sections 5.1, 5.2, 5.4, 5.5, 6.1, and 6.2 (9/17/97); 8020 (4/25/96); 8030 (4/25/96); 8060 (4/25/96); A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 40. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 41. Operator shall maintain accurate monthly records of Gas-to-Oil Ratio (GOR) and API gravity of liquids produced showing that the facility exclusively processes, stores, or transfers black oil (as defined in 40 CFR 63.761). [40 CFR 63.10(b)], [Federally Enforceable Through Title V]
- 42. When applicable to 40 CFR Part 68, a subject facility shall submit to the proper authority a Risk Management Plan when mandated by the regulation. [40 CFR Part 68], [Federally Enforceable Through Title V]
- 43. All permits for facilities #S-1129, S-1141, S-1549 and S-2592 are included in Texaco Inc.'s Heavy Oil Western stationary source. [District Rule 2201], [Federally Enforceable Through Title V]
- 44. On March 16, 2001, the initial Title V permit was issued, the reporting period of the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days of the end of reporting period. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-3-5 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

18 UNCONTROLLED CYCLICALLY STEAMED OIL WELLS

- 1. Permittee shall maintain a current well roster of all open vent wells, and such roster shall be made readily available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]
- 2. Uncontrolled cyclically steamed wells shall be located more than 1,000 ft from an existing well vent vapor control system. [District Rule 4401, 4.5.1], [Federally Enforceable Through Title V]
- 3. Permittee shall maintain well roster for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-6-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

500 BBL SUMP REPLACEMENT TANK WITH PRESSURE VACUUM VALVE (B&M LEASE)

- 1. The tank shall be equipped with a fixed roof with no holes or openings. [District NSR Rule], [Federally Enforceable Through Title V]
- 2. Tank roof appurtenances shall be maintained leak free. [District Rule 4402, 5.3], [Federally Enforceable Through Title V]
- 3. The tank PV valve shall be set to within 10% of the maximum allowable working pressure of the tank. [District Rule 4402, 5.3], [Federally Enforceable Through Title V]
- 4. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 5. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 6. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 7. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-7-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF SUMP REPLACEMENT TANK WITH PRESSURE VACUUM VALVE AND ASSOCIATED VALVES, FLANGES, PUMPS, AND PIPING

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. True vapor pressure of liquids stored in tank shall not exceed 1.5 psia at storage temperature. [District Rule 2201]
- 3. Valves and flanges shall be maintained in good repair and shall have no visible leaks. [District Rule 4623]
- 4. Pressure/vacuum relief valve shall be set to within 10% of the maximum working pressure of the tank. [District Rule 4623]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-8-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

2,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #2GF79, TWO HEATER TREATER VESSELS, AND ONE FREE WATER KNOCKOUT VESSEL, SERVED BY VAPOR CONTROL SYSTEM

- 1. Both heater treater vessels and the free water knockout vessel shall vent only to petroleum storage tank S-1549-8. [District NSR Rule], [Federally Enforceable Through Title V]
- 2. Tank shall vent only to vapor control equipment listed below. [District NSR Rule], [Federally Enforceable Through Title V]
- 3. The vapor control equipment shall be capable of reducing VOC emissions by at least 95% by weight. [District Rule 4623, 5.3.1 and District NSR Rule], [Federally Enforceable Through Title V]
- 4. Vapor control equipment shall consist of vapor piping from two heater treater vessels, one free water knockout vessel, and tanks S-1549-8, '11, '12, '39, '40, and '117; vapor compressor, vapor compressor inlet and outlet heat exchangers, condensate pump, gas/liquid separators, and non-condensible vapor piping to TEOR system S-1141-250 and authorized incineration devices. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. Vapor control equipment compressor shall activate before the pressure relief valve on any of the units served by the vapor control system vents. [District NSR Rule], [Federally Enforceable Through Title V]
- Authorized incineration devices for collected vapors are steam generators S-1141-26, '31, '44, '45, '46, '52, '53, '55, '60, '61, '391, '392, '396, '515, '516, '517, '518, '519, '525, '526, '527, '528, '530, '531, '532, '533, '534, and '535. [District NSR Rule], [Federally Enforceable Through Title V]
- 7. Collected vapors shall be disposed of in District approved incineration devices as listed on this permit or in Department of Oil, Gas and Geothermal Resources (DOGGR) approved vapor disposal wells. Permittee shall make copies of DOGGR approval for injection wells and make such documentation readily available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]
- 8. There shall be no leaks in excess of 10,000 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District NSR Rule and District Rule 4623, 3.3], [Federally Enforceable Through Title V]
- 9. Total number of components in vapor control equipment skid and in vapor piping from tanks S-1549-8, '11, '12, '39, '40 and '117 shall not exceed the following: 50 valves, 2 pump seals, 93 connectors, 75 flanges, 3 open ended lines, and 29 other. [District NSR Rule], [Federally Enforceable Through Title V]
- 10. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c (Feb 1999), from the total number of components in vapor control equipment skid and in vapor piping from tanks S-1549-8, '11, '12, '39, '40, and '117 shall not exceed 0.36 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 11. Vapor control equipment components shall be inspected for leaks at least quarterly using a portable hydrocarbon detection instrument. Any vapor leak greater than 5000 ppm, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, or condensate leaking at a rate of greater than 3 drops of liquid per minute shall be repaired in a manner consistent with the procedures specified in Rule 4403 (amended 2/16/95) Section 5.1.4, 5.1.5, and 5.1.6. [District NSR Rule], [Federally Enforceable Through Title V]
- 12. Portable hydrocarbon detection instrument shall be operated and calibrated in accordance with recommendations in CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (Feb 1999). [District NSR Rule], [Federally Enforceable Through Title V]
- 13. Flanges shall monitored with portable hydrocarbon detection instrument along the entire circumference of the flange-gasket interface. Threaded connections, tubing fittings, and other types of non-permanent joints shall be monitored along the entire circumference of joint interface. [District NSR Rule], [Federally Enforceable Through Title V]
- 14. Valves shall be monitored with portable hydrocarbon detection instrument where the stem comes through the packing gland, and at any attached or connected body flange(s), bonnet flange(s), or plug(s). [District NSR Rule], [Federally Enforceable Through Title V]
- 15. All other components such as diaphragms, dump arms, instruments, meters shall be monitored at all points of possible emissions. [District NSR Rule], [Federally Enforceable Through Title V]

- 16. Permittee shall document Department of Oil & Gas Geothermal Resources approval for vapor disposal wells prior to injection of vapors. [District Rule 4401 and District NSR Rule], [Federally Enforceable Through Title V]
- 17. Permittee shall cease injection vapors & notify the District immediately if DOGGR injection approval is revoked, denied, terminated, surrendered or altered to disallow injection. [District NSR Rule], [Federally Enforceable Through Title V]
- 18. Permittee shall maintain accurate quarterly records of vapor control system component counts, number of components leaking in excess of 10,000 ppm, and number of components leaking less than or equal to 10,000 ppm. [District NSR Rule], [Federally Enforceable Through Title V]
- 19. The permittee shall keep accurate records of true vapor pressure, Reid vapor pressure, storage temperature and types of liquids stored for a period of five years and shall make such records available for District inspection upon request. [District Rule 4623, 6.1 and District NSR Rule], [Federally Enforceable Through Title V]
- 20. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
- 21. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
- 22. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 23. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 24. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 25. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 26. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V1
- 27. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 28. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 29. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
- 30. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]

- 31. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
- 32. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
- 33. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 34. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-9-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #2GF35

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-10-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #2GF36

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-11-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

2,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #2GF72 SERVED BY VAPOR CONTROL SYSTEM LISTED ON PERMIT S-1549-8

- 1. Tank shall vent only to vapor control equipment listed in S-1549-8. [District NSR Rule], [Federally Enforceable Through Title V]
- 2. There shall be no leaks in excess of 10,000 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District Rule 4623, 3.3 and District NSR Rule], [Federally Enforceable Through Title V]
- 3. Permittee shall inspect and maintain fugitive components as specified in S-1549-8. [District NSR Rule], [Federally Enforceable Through Title V]
- 4. Fugitive VOC emission rate shall not exceed that listed in S-1549-8. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. All tank gauging or sampling devices shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except during gauging and sampling. [District Rule 4623, 5.3.2 and District NSR Rule], [Federally Enforceable Through Title V]
- 6. The permittee shall keep accurate records of true vapor pressure, Reid vapor pressure, storage temperature and types of liquids stored for a period of five years and shall make such records available for District inspection upon request. [District Rule 4623, 6.1 and District NSR Rule], [Federally Enforceable Through Title V]
- 7. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 95% by weight. [District Rule 4623, 5.3.1], [Federally Enforceable Through Title V]
- 8. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
- 9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

- 15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 16. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
- 17. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
- 18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
- 19. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
- 20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-12-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

2,000 BBL FIXED ROOF PETROLEUM STORAGE TANK #2GF73 SERVED BY VAPOR CONTROL EQUIPMENT LISTED ON PERMIT S-1549-8

- 1. Tank shall vent only to vapor control equipment listed in S-1549-8. [District NSR Rule], [Federally Enforceable Through Title V]
- 2. There shall be no leaks in excess of 10,000 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District Rule 4623, 3.3 and District NSR Rule], [Federally Enforceable Through Title V]
- 3. Permittee shall inspect and maintain fugitive components as specified in S-1549-8. [District NSR Rule], [Federally Enforceable Through Title V]
- 4. Fugitive VOC emission rate shall not exceed that listed in S-1549-8. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. All tank gauging or sampling devices shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except during gauging and sampling. [District Rule 4623, 5.3.2 and District NSR Rule], [Federally Enforceable Through Title V]
- 6. The permittee shall keep accurate records of true vapor pressure, Reid vapor pressure, storage temperature and types of liquids stored for a period of five years and shall make such records available for District inspection upon request. [District Rule 4623, 6.1 and District NSR Rule], [Federally Enforceable Through Title V]
- 7. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 95% by weight. [District Rule 4623, 5.3.1], [Federally Enforceable Through Title V]
- 8. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
- 9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

- 15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 16. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
- 17. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
- 18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
- 19. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
- 20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-13-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

8,400 GALLON FIXED ROOF PETROELUM STORAGE TANK, #TK1

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-14-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

8,400 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #TK2

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-15-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

4,200 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #TK3

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-18-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #0501079 - TANK REMOVED - CANCELLED WITH 94/95 BILLING - TJG

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-19-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #WT500 - TANK REMOVED - CANCELLED ON 94/95 BILLING - TJG

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-20-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-21-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #10X2218

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-22-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

39,900 GALLON FIXED ROOF PETROLEUM STORAGE TANK #13788

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-23-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

39,900 GALLON FIXED ROOF PETROLEUM STORAGE TANK #WT1

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-24-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

10,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK #TK1

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-25-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

10,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK, TK #2

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-33-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

105,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #10330

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-34-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK #13969

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-35-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #SO13741 - TANK REMOVED - CANCELLED ON 94/95 BILLING - TJG

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-36-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #SO13740 - TANK REMOVED - CANCELLED ON 94/95 BILLING - TJG

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-37-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

31,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #WT 1 - TANK REMOVED - CANCELLED ON 94/95 BILLING - TJG

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-38-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #WT 2 - TANK REMOVED - CANCELLED ON 94/95 BILLING - TJG

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-39-2 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

2,000 BARREL FIXED ROOF SUMP REPLACEMENT TANK SERVED BY VAPOR CONTROL EQUIPMENT LISTED ON PERMIT S-1549-8

- 1. Tank shall vent only to vapor control equipment listed in S-1549-8. [District NSR Rule], [Federally Enforceable Through Title V]
- 2. There shall be no leaks in excess of 10,000 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District Rule 4623, 3.3 and District NSR Rule], [Federally Enforceable Through Title V]
- 3. Permittee shall inspect and maintain fugitive components as specified in S-1549-8. [District NSR Rule], [Federally Enforceable Through Title V]
- 4. Fugitive VOC emission rate shall not exceed that listed in S-1549-8. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. All tank gauging or sampling devices shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except during gauging and sampling. [District Rule 4623, 5.3.2 and District NSR Rule], [Federally Enforceable Through Title V]
- 6. The permittee shall keep accurate records of true vapor pressure, Reid vapor pressure, storage temperature and types of liquids stored for a period of five years and shall make such records available for District inspection upon request. [District Rules 4623, 6.1 and District NSR Rule], [Federally Enforceable Through Title V]
- 7. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 95% by weight. [District Rule 4623, 5.3.1], [Federally Enforceable Through Title V]
- 8. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
- 9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

- 15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 16. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
- 17. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
- 18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
- 19. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
- 20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-40-2 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

1,000 BARREL SUMP REPLACEMENT TANK SERVED BY VAPOR CONTROL EQUIPMENT LISTED ON PERMIT S-1549-8

- 1. Tank shall vent only to vapor control equipment listed in S-1549-8. [District NSR Rule], [Federally Enforceable Through Title V]
- 2. There shall be no leaks in excess of 10,000 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District Rule 4623, 3.3 and District NSR Rule], [Federally Enforceable Through Title V]
- 3. Permittee shall inspect and maintain fugitive components as specified in S-1549-8. [District NSR Rule], [Federally Enforceable Through Title V]
- 4. Fugitive VOC emission rate shall not exceed that listed in S-1549-8. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. All tank gauging or sampling devices shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except during gauging and sampling. [District Rule 4623, 5.3.2 and District NSR Rule], [Federally Enforceable Through Title V]
- 6. The permittee shall keep accurate records of true vapor pressure, Reid vapor pressure, storage temperature and types of liquids stored for a period of five years and shall make such records available for District inspection upon request. [District Rules 4623, 6.1 and District NSR Rule], [Federally Enforceable Through Title V]
- 7. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 95% by weight. [District Rule 4623, 5.3.1], [Federally Enforceable Through Title V]
- 8. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
- 9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V1
- 14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

- 15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 16. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
- 17. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
- 18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
- 19. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
- 20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-43-4 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

13.3 MMBTU/HR OIL FIRED STRUTHERS STEAM GENERATOR

- 1. If continuous operation oxygen analyzer/controller is utilized, excess O2 shall be maintained between 0.5 and 3.0%. If not utilized, excess O2 shall be maintained at no less than 15%. [District NSR Rule], [Federally Enforceable Through Title V]
- 2. Fuel oil preheat and atomization equipment shall be operated and maintained as recommended by manufacturer. [District NSR Rule], [Federally Enforceable Through Title V]
- 3. Fuel oil sulfur content shall not exceed 0.85% by weight. [District NSR Rule], [Federally Enforceable Through Title V]
- 4. NOx (as NO2) emission rate shall not exceed 2.5 lbm/bbl of fuel. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)], [Federally Enforceable Through Title V]
- 6. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 7. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
- 8. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
- 9. Source testing shall be performed using EPA Method 5 while firing on residual oil (including crude or topped crude) to demonstrate compliance with PM emission limits. Source testing shall be performed within 60 days of firing on residual oil unless such testing has been performed within the 12 month period prior to firing on said oil and the test results showed compliance with PM emission limits of this permit. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 10. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit on fuel oil not exceeding 0.85% sulfur by weight; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and 4301, 5.2.1], [Federally Enforceable Through Title VI
- 11. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 12. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B or Method 8. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 13. If the unit is fired on noncertified liquid fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the liquid fuel being fired in the unit shall be determined using ASTM D 2880. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 14. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240 or D 2382 for liquid hydrocarbon fuels; ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1], [Federally Enforceable Through Title V]

- 15. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 0.85% by weight for residual oil (including crude or topped crude); or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.4.2, District Rule 4801, and Kern County Rule 407], [Federally Enforceable Through Title V]
- 16. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. For residual and crude oil fired units, compliance may be demonstrated through supplier certification of nitrogen content and heating value or by weekly fuel testing for nitrogen content and heating value. Hourly emissions shall be calculated using the heating value, maximum rated unit capacity, and the following formula: lb NO2/1000 gal = 20.54 + 104.39 (N), where N is the weight % nitrogen in the fuel. If compliance with the NOx emission limit is demonstrated through the fuel nitrogen content testing and compliance has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be bi-annually. If a bi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 4301, 5.2.2 and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 17. If the unit is fired on noncertified residual or crude oil and compliance with NOx emission limits is achieved through fuel nitrogen content testing, then the nitrogen content of the fuel being fired in the unit shall be determined using ASTM D3431. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-46-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 100 BARREL SUMP REPLACEMENT TANK

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-47-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 100 BARREL SUMP REPLACEMENT TANK

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-48-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 1000 BARREL WAST WATER TANK

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-66-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #13619

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-67-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #50-11335

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-70-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #13732

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-71-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #13618

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-72-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #13898

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-73-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #50-13950

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-74-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 21,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #156504

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-75-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, # WT1

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-76-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 8,400 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #JT14

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-77-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 67,200 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #50-13916

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-78-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #JT1

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-79-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #50-13932

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-80-0 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 31,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK, #50-13799

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 3. Sulfur compound emissions shall not exceed 2000 ppmv as SO2. [District Rule 4801]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-107-2 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-108-2 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

42,000 GALLON FIXED ROOF STORAGE TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-113-7 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

MCDONALD/STAR WELL VENT VAPOR CONTROL SYSTEM WITH UP TO 139 CYCLIC WELLS, GAS/LIQUID SEPARATORS, VAPOR CONDENSERS, VAPOR COMPRESSORS, AND ASSOCIATED PIPING NETWORK VENTED TO WASTE GAS INJECTION WELL

- 1. The crude oil production from wells associated with this permit unit shall not lie within 1000 feet of an air injection well used for in-situ combustion. [District Rule 4407, 2.0, 3.4, and 3.5], [Federally Enforceable Through Title V]
- During the time any steam-enhanced crude oil production well is undergoing service or repair while the well is not producing, it shall be exempt from the emission control requirements of District Rule 4401, 5.0 (as amended January 15, 1998). [District Rule 4401, 4.1], [Federally Enforceable Through Title V]
- All required source testing shall conform to the compliance testing procedures described in District Rule 1081(as amended December 16, 1993). [District Rule 1081 and County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera)], [Federally Enforceable Through Title V]
- 4. The operator shall maintain monitoring records of the date and well identification where steam injection or well stimulation occurs. [District Rule 4401, 6.1.1], [Federally Enforceable Through Title V]
- 5. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
- 6. The uncontrolled VOC emissions from any well vent shall be reduced by at least 99 percent by weight or, if several steam-enhanced crude oil production well vents are connected to a vapor collection and control system, total uncontrolled VOC emissions shall be reduced by at least 99 percent. This requirement does not apply to cyclic wells located on contiguous and adjacent oil production properties with less than 10 cyclic wells owned by or under the control of a company. [District Rule 4401, 5.1 and 5.2], [Federally Enforceable Through Title V]
- 7. For cyclic wells located on properties with less than 10 cyclic wells and owned by a company, the uncontrolled VOC emissions from any well vent or system of well vents connected to a single vapor collection and control device shall be reduced by at least 50 percent.

 Properties shall include contiguous and adjacent oil production properties owned by or under control of the company. [District Rule 4401, 5.4], [Federally Enforceable Through Title V]
- 8. Total number of leaks from the vapor collection and control system, including condensate handling, shall not exceed the number as allowed by Rule 4401 (as amended January 15, 1998) at any one time. [District Rule 4401, 5.3], [Federally Enforceable Through Title V]
- 9. Units consisting of more than 500 wells shall not exceed one leak detected for each 20 wells tested with a minimum of 50 wells tested. [District Rule 4401, 5.3], [Federally Enforceable Through Title V]
- 10. Operator shall affix a readily visible tag bearing the date on which a leak is detected. The tag shall remain in place until the leaking component is repaired. [District Rule 4401, 5.3.1], [Federally Enforceable Through Title V]
- 11. Operator shall repair each leak within 15 calendar days of detection. The APCO may grant a 10 calendar day extension if the operator demonstrates that the necessary and sufficient actions have and are being taken to correct the leak. [District Rule 4401, 5.3.1], [Federally Enforceable Through Title V]
- 12. Operator shall maintain all components of a well vent vapor collection and control system in good repair. Components of the well vent vapor collection and control system shall include all piping, valves, fittings, pumps, compressors, tanks, etc. used to collect, control, store, or dispose of VOC condensate or non-condensable VOCs and which is prior to any blending of VOC condensate with crude oil or blending of non-condensable VOCs with gases to be used as a fuel. [District Rule 4401, 5.3 and 5.3.2], [Federally Enforceable Through Title V]
- 13. Annual control efficiency compliance tests shall be performed on all vapor collection and control systems used to control emissions from steam-enhanced crude oil production wells. Testing shall be performed by source testers certified by the California Air Resources Board (CARB) during June, July, August or September of each year if the system's control efficiency is dependent upon ambient air temperature. The APCO may waive the annual testing requirements of this condition if the vapor control system does not exhaust to atmosphere or if all uncondensed VOC emissions collected by a vapor collection and control system are incinerated in fuel burning equipment, an internal combustion engine or in a smokeless open flare, and the source's Operating Permit contains adequate periodic monitoring to ensure the source meets 99% control efficiency. [District Rule 4401, 5.1, 5.2 and 6.2.1], [Federally Enforceable Through Title V]

- 14. The control efficiency of the vapor collection and control system used to control VOC emissions from steam enhanced crude oil production well shall be determined by mass balance based on most stringent of a source test, USEPA approved emission factors, or Air Pollution (AP)-42 emission factors for components and number of components; and the efficiency of destruction devices determined by USEPA Method 25, 25a, or 25b as applicable. [District Rule 4401, 6.3.1], [Federally Enforceable Through Title V]
- 15. VOC content shall be determined using the latest revision of ASTM Method E168, E169, or E260 as applicable. Halogenated exempt compounds shall be determined by CARB Method 432. [District Rule 4401, 6.3.2], [Federally Enforceable Through Title V]
- 16. The source shall perform leak inspections at least annually, using a portable hydrocarbon detection instrument in accordance with USEPA Method 21. [District Rules 2520, 9.4.2 and 4401, 6.3.3], [Federally Enforceable Through Title V]
- 17. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following requirements: County Rules 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), and 110 (Madera). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 18. Compliance with permit conditions in the Title V permit shall be deemed in compliance with SJVUAPCD Rule 4401 (Amended January 15, 1998), excluding sections 5.1 and 5.2 for control systems which have been waived from complying with the requirement of section 6.2.1. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 19. The requirements of SJVUAPCD Rule 4407 (Adopted May 19, 1994) do not apply to this permit unit. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 20. TEOR operation with well vent vapor control system including: vapor collection piping, vapor compressors, fin-fan heat exchangers, gas/liquid separators, water/oil cooled heat exchangers, condensate drums/enclosed tanks, condensate pumps, gas injection compressors, condensate piping to production tankage, and non-condensible vapor piping to vapor disposal devices. [District NSR Rule], [Federally Enforceable Through Title V]
- 21. This permit authorizes TEOR operations at the following locations: Sec 15, 20, 21, 22, 23, 24, 25, 26, 27, 28, 34, 35, 36 of T31S, R22E; Sec 1, 2 of T32S, R22E; Sec 30, 31 of T31S, R23E; and Sec 6 of T32S, R23E. [District NSR Rule], [Federally Enforceable Through Title V]
- 22. Collected vapors shall disposed of in District approved incineration devices as listed on this permit or in Department of Oil, Gas and Geothermal Resources (DOGGR) approved vapor disposal wells. Permittee shall make copies of DOGGR approval for injection wells and make such documentation readily available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]
- 23. Permittee shall maintain with the permit a current listing of all steam enhanced wells connected to the casing vent control system and shall make such listing readily available for District inspection upon request. [District Rule 1070], [Federally Enforceable Through Title V]
- 24. Emissions rate of VOC associated with the fugitive emissions from TEOR system including condensate collection and handling, and polish rod stuffing box fugitive emissions shall not exceed 1716.5 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 25. VOC fraction of total organic compounds in gas after compression shall not exceed 25% by weight. Permittee shall test using EPA Method E168, E169 or E260 a representative sample, per District approved plan after initial compression not less than once per calendar quarter. Records of test shall be maintained for a period of five years and be made readily available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]
- 26. Permittee shall maintain with the permit accurate fugitive component counts and resulting emissions calculated using District approved emission factors from API Publication 4322 Table M1. [District NSR & 1070 Rules], [Federally Enforceable Through Title V]
- 27. Authorized incineration sources for collected vapors include steam generators S-1141-22, '23, '26, '29, '31, '44, '45, '46, '52, '53, '54, '55, '56, '57, '58, '59, '60, '61, '62, '63, '64, '71, '391, '392, '396, '398, and '400. [District NSR Rule], [Federally Enforceable Through Title V]
- 28. Gas/liquid separators and condensate drums/tanks and all other equipment used to handle or store condensate shall be inclosed and shall vent only to vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]
- 29. Water/VOC condensate from gas/liquid separators and condensate drums shall be pumped only to production manifold or to production facilities equipped with an operating vapor control system. [District NSR Rule], [Federally Enforceable Through Title V]
- 30. Well casing vents or downstream valves may be closed if wells are producing to tanks equipped with an operating vapor control system or if the wells are idle. [District NSR & 4401 Rules], [Federally Enforceable Through Title V]
- 31. TEOR operation shall include vapor piping from tank vapor control system listed on permit S-1141-417. [District NSR Rule], [Federally Enforceable Through Title V]
- 32. Permittee shall document Department of Oil & Gas Geothermal Resources (DOGGR) approval for vapor disposal wells prior to injection of vapors. [District NSR & 4401 Rules], [Federally Enforceable Through Title V]
- 33. Permittee shall cease injection vapors & notify the District immediately if DOGGR injection approval is revoked, denied, terminated, surrendered or altered to disallow injection. [District NSR Rule], [Federally Enforceable Through Title V]
- 34. An inspection and maintenance program consistent that described in Rule 4403 sections 5.1 and 5.3 shall be implemented for stuffing boxes and polish rods for 136 wells on the McDonald/Star properties (SW/4 Sec. 26, T31S, R22E) and for all wells put into thermally enhanced production after issuance date of this ATC. [District NSR Rule], [Federally Enforceable Through Title V]

- 35. Thermal oxidizer located at NE/4 Sec. 35, T31S, R22E may be used to incinerate vapors collected from TEOR wells and tank vapor control system listed on permit S-1141-417 when other vapor incineration devices are not operating. Thermal oxidizer shall not operate when any other vapor incineration devices are operating regardless of whether such devices are incinerating TEOR or tank vapors. [District NSR Rule], [Federally Enforceable Through Title V]
- 36. Thermal oxidizer shall be equipped with an operational temperature indicator. [District NSR Rule], [Federally Enforceable Through Title V]
- 37. Thermal oxidizer shall operate between 1200 F and 1800 F and shall have a minimum residence time of one second. On any day oxidizer is in operation permittee shall record thermal oxidizer operating temperature. Such records shall be maintained for a period of five years and be made readily available for District inspection upon request. [District NSR Rule], [Federally Enforceable Through Title V]
- 38. Thermal oxidizer shall be compliance source tested for VOC destruction efficiency each time the oxidizer is put into operation unless testing has been conducted within the previous 12 months. Thermal oxidizer shall be tested not less than annually in any year that the oxidizer is in operated. Testing shall be conducted using EPA Method 25. [District NSR Rule], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-114-6 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 12.6 MMBTU/HR GAS-FIRED NATIONAL HEATER TREATER, SA# 1050-239

- 1. Emission rates shall not exceed any of the following: PM10: 0.078 lb/MMBtu; SOx (as SO2): 0.238 lb/MMBtu; NOx (as NO2): 0.036 lb/MMBtu (30 ppmv @ 3% O2); VOC: 0.007 lb/MMBtu; or CO: 111 ppmv @ 3% O2. [District NSR & 4305 Rules], [Federally Enforceable Through Title V]
- 2. Source testing for NOx and CO emissions shall be conducted not less than once every 12 months, except as provided below. [District Rule 4305 & 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. Source testing for NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rule 4305 & 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. If permittee fails to comply with any NOx and/or CO emission limits when testing not less than once every 36 months, source testing for NOx and CO emissions shall be conducted not less than once every 12 months. [District Rule 4305 & 2520, 9.4.2], [Federally Enforceable Through Title V]
- 5. Source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NOx and CO source testing requirement. [District Rule 4305 & 2520, 9.4.2], [Federally Enforceable Through Title V]
- 6. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081 & 2520, 9.4.2], [Federally Enforceable Through Title V]
- 7. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081 & 2520, 9.4.2], [Federally Enforceable Through Title V]
- 8. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, and stack gas oxygen EPA Method 3 or 3A or ARB Method 100. [District Rules 1081, 4305, and 4351], [Federally Enforceable Through Title V]
- 9. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
- 10. The stack concentration of NOx (as NO2), CO, and O2 shall be measured at least on a monthly basis using District approved portable analyzers. [District Rule 4305 & 2520, 9.4.2], [Federally Enforceable Through Title V]
- 11. The permittee shall maintain records of the date and time of NOx, CO, and O2 measurements, the measured NO2 and CO concentrations corrected to 3% O2, and the O2 concentration. The records shall also include a description of any corrective action taken to maintain the emissions in the acceptable range. These records shall be retained at the facility for a period of no less than two years and shall be made readily available for District inspection upon request. [District Rules 1070 and 4305], [Federally Enforceable Through Title V]
- 12. If the NOx or CO concentrations, as measured by the portable analyzer, exceed the permitted emission limits, the permittee or third party shall notify the District and return the NOx and CO concentrations to the permitted emission limits as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed the permitted emission limits after (1) hour, the permittee shall conduct a source test within 60 days, of the first exceedance to demonstrate compliance with the permitted emission limits. [District Rule 4305 & 2520, 9.4.2], [Federally Enforceable Through Title V]
- 13. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (amended 12/16/93), of three 40-minute test runs for NOx and CO. This mean shall be multiplied by the appropriate factor. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 14. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081, and Kern County Rule 108.1], [Federally Enforceable Through Title V]
- 15. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

- 16. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
- 17. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
- 18. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and 4301, 5.2.1], [Federally Enforceable Through Title V]
- 19. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 20. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 21. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 22. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240 or D 2382 for liquid hydrocarbon fuels; ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1], [Federally Enforceable Through Title V]
- 23. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.4.2, District Rule 4801, and Kern County Rule 407], [Federally Enforceable Through Title V]
- 24. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-115-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 22.0 MMBTU/HR STRUTHERS STEAM GENERATOR #2 WITH O2 CONTROLLER, SA # 10860-65 ***CANCELED PER COMPLIANCE PLAN REPLACED BY S-1549-201, WJI***

- 1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 2. Particulate matter emissions from any combustion source shall not exceed 0.1 gr/dscf (calculated to 12% Carbon Dioxide). [District Rule 4102]
- 3. Fuel oil preheat and atomization equipment shall be operated and maintained as intended by manufacturer. [District Rule 2201]
- 4. Excess combustion air shall be maintained at no less than 15% unless continuous operation oxygen analyzer/controller is utilized. [District Rule 2201]
- 5. Fuel oil sulfur content shall not exceed 1.52% by weight. [District Rule 2201]
- 6. Maximum emission rate when oil firing shall not exceed the following: PM10: 18.0 lbm/1000 gallons, SOx (as SO2): 247.1 lbm/1000 gallons, NOx (as NO2): 52.5 lbm 1000 gallons, VOC: 1.0 lbm/1000 gallons, CO: 5.1 lbm/1000 gallons. [District Rule 2201]
- 7. Compliance with NOx & CO emission rates, and fuel oil sulfur content shall be demonstrated by District-witnessed sample collection by independent laboratory annually within 60 days prior to permit anniversary. [District Rule 1081]
- 8. Sample collection shall be conducted under conditions representative of normal operation. [District Rule 1081]
- 9. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
- 10. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 11. Maximum daily fuel rate shall not exceed 2253 gallons/day. [District Rule 2201]
- 12. The permittee shall maintain daily records of volume of fuel combusted. [District Rules 1070 & 2201]
- 13. Records required by this permit shall be retained on site for a period of at least two years and shall be made readily available for District inspection upon request. [District Rule 1070]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-116-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 22.0 MMBTU/HR STRUTHERS STEAM GENERATOR HO #1 WITH WESTINGHOUSE O2 CONTROLLER, SA#5856-65 ***CANCELED PER COMPLIANCE PLAN-REPLACED BY S-1549-129, WJI***

- 1. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
- 2. Particulate matter emissions from any combustion source shall not exceed 0.1 gr/dscf (calculated to 12% Carbon Dioxide). [District Rule 4102]
- 3. Fuel oil preheat and atomization equipment shall be operated and maintained as intended by manufacturer. [District Rule 2201]
- 4. Excess combustion air shall be maintained at no less than 15% unless continuous operation oxygen analyzer/controller is utilized. [District Rule 2201]
- 5. Fuel oil sulfur content shall not exceed 1.52% by weight. [District Rule 2201]
- 6. Maximum emission rate when oil firing shall not exceed the following: PM10: 18.3 lbm/1000 gallons, SOx (as SO2): 251.3 lbm/1000 gallons, NOx (as NO2): 52.5 lbm 1000 gallons, VOC: 1.0 lbm/1000 gallons, CO: 5.0 lbm/1000 gallons. [District Rule 2201]
- 7. Compliance with NOx & CO emission rates, and fuel oil sulfur content shall be demonstrated by District-witnessed sample collection by independent laboratory annually within 60 days prior to permit anniversary. [District Rule 1081]
- 8. Sample collection shall be conducted under conditions representative of normal operation. [District Rules 1081 & 2201]
- 9. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
- 10. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 11. Maximum daily fuel rate shall not exceed 2253 gallons/day. [District Rule 2201]
- 12. The permittee shall maintain daily records of volume of fuel combusted. [District Rules 1070 & 2201]
- 13. Records required by this permit shall be retained on site for a period of at least two years and shall be made readily available for District inspection upon request. [District Rule 1070]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-117-3 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

1,000 BBL FIXED ROOF PETROLEUM STORAGE TANK - MCDONALD LEASE SERVED BY VAPOR CONTROL EQUIPMENT LISTED ON PERMIT S-1549-8

- 1. Tank shall vent only to vapor control equipment listed in S-1549-8. [District Rule 2201]
- 2. There shall be no leaks in excess of 10,000 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District Rules 2201 and 4623]
- 3. Permittee shall inspect and maintain fugitive components as specified in S-1549-8. [District Rule 2201]
- 4. Fugitive VOC emission rate shall not exceed that listed in S-1549-8. [District Rule 2201]
- 5. All tank gauging or sampling devices shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except during gauging and sampling. [District Rules 2201 and 4623]
- 6. The permittee shall keep accurate records of true vapor pressure, storage temperature and types of liquids stored for a period of five years and shall make such records available for District inspection upon request. [District Rules 2201 and 4623]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-118-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 8,400 GALLON FIXED ROOF PETROLEUM STORAGE TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-119-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 8,400 GALLON FIXED ROOF PETROLEUM STORAGE TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-120-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 31,500 GALLON FIXED ROOF PETROLEUM STORAGE TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-121-2 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK

- Heater treater vessel and free water knockout vessel shall vent only to petroleum storage tank S-1549-121. [District NSR Rule], [Federally Enforceable Through Title V]
- 2. Tank shall vent only to vapor control equipment listed below. [District NSR Rule], [Federally Enforceable Through Title V]
- 3. The vapor control equipment shall be capable of reducing VOC emissions by at least 95% by weight. [District Rules 4623, 5.3.1 and District NSR Rule], [Federally Enforceable Through Title V]
- 4. Vapor control equipment shall consist of vapor piping from one heater treater vessel, one free water knockout vessel, and tanks S-1549-121, '122, '124, '125, and '126; vapor compressor, vapor compressor inlet and outlet heat exchangers, condensate pump, gas/liquid separators, and non-condensible vapor piping to TEOR system S-1141-250 and authorized incineration devices. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. Vapor control equipment compressor shall activate before the pressure relief valve on any of the units served by the vapor control system vents. [District NSR Rule], [Federally Enforceable Through Title V]
- Authorized incineration devices for collected vapors are steam generators S-1141-26, '31, '44, '45, '46, '52, '53, '55, '60, '61, '391, '392, '396, '515, '516, '517, '518, '519, '525, '526, '527, '528, '530, '531, '532, '533, '534, and '535. [District NSR Rule], [Federally Enforceable Through Title VI
- 7. There shall be no leaks in excess of 10,000 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District Rule 4623, 3.3 and District NSR Rule], [Federally Enforceable Through Title V]
- 8. Total number of components in vapor control equipment skid and in vapor piping from tanks S-1549-121, '122, '124, '125 and '126 shall not exceed the following: 37 valves, 2 pump seals, 73 connectors, 58 flanges, 3 open ended lines, and 24 other. [District NSR Rule], [Federally Enforceable Through Title V]
- 9. Fugitive VOC emissions rate, calculated using CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c (Feb 1999), from the total number of components in vapor control equipment skid and in vapor piping from tanks S-1549-121, '122, '124, '125, and '126 shall not exceed 0.30 lb/day. [District NSR Rule], [Federally Enforceable Through Title V]
- 10. Vapor control equipment components shall be inspected for leaks at least quarterly using a portable hydrocarbon detection instrument. Any vapor leak greater than 5000 ppm, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21, or condensate leaking at a rate of greater than 3 drops of liquid per minute shall be repaired in a manner consistent with the procedures specified in Rule 4403 (amended 2/16/95) Section 5.1.4, 5.1.5, and 5.1.6. [District NSR Rule], [Federally Enforceable Through Title V]
- 11. Portable hydrocarbon detection instrument shall be operated and calibrated in accordance with recommendations in CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (Feb 1999). [District NSR Rule], [Federally Enforceable Through Title V]
- 12. Flanges shall monitored with portable hydrocarbon detection instrument along the entire circumference of the flange-gasket interface. Threaded connections, tubing fittings, and other types of non-permanent joints shall be monitored along the entire circumference of joint interface. [District NSR Rule], [Federally Enforceable Through Title V]
- 13. Valves shall be monitored with portable hydrocarbon detection instrument where the stem comes through the packing gland, and at any attached or connected body flange(s), bonnet flange(s), or plug(s). [District NSR Rule], [Federally Enforceable Through Title V]
- 14. All other components such as diaphragms, dump arms, instruments, meters shall be monitored at all points of possible emissions. [District NSR Rule], [Federally Enforceable Through Title V]
- 15. Permittee shall maintain accurate quarterly records of vapor control equipment component counts, number of components leaking in excess of 10,000 ppm, and number of components leaking less than or equal to 10,000 ppm. [District NSR Rule], [Federally Enforceable Through Title V]

- 16. The permittee shall keep accurate records of true vapor pressure, Reid vapor pressure, storage temperature and types of liquids stored for a period of five years and shall make such records available for District inspection upon request. [District Rules 4623, 6.1 and District NSR Rule], [Federally Enforceable Through Title V]
- 17. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a gas-tight cover which shall be closed at all times except during gauging or sampling. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.2], [Federally Enforceable Through Title V]
- 18. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
- 19. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 20. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 21. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 22. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 23. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V1]
- 24. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 25. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 26. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
- 27. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
- 28. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
- 29. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
- 30. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

31.	The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-122-2 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 84,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK

- 1. Tank shall vent only to vapor control equipment listed in S-1549-121. [District NSR Rule], [Federally Enforceable Through Title V]
- 2. There shall be no leaks in excess of 10,000 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District Rule 4623 and District NSR Rule], [Federally Enforceable Through Title V]
- Permittee shall inspect and maintain fugitive components as specified in S-1549-121. [District NSR Rule], [Federally Enforceable Through Title VI
- 4. Fugitive VOC emission rate shall not exceed that listed in S-1549-121. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. All tank gauging or sampling devices shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except during gauging and sampling. [District Rule 4623 and District NSR Rule], [Federally Enforceable Through Title V]
- 6. The permittee shall keep accurate records of true vapor pressure, Reid vapor pressure, storage temperature and types of liquids stored for a period of five years and shall make such records available for District inspection upon request. [District Rule 4623 and District NSR Rule], [Federally Enforceable Through Title V]
- 7. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 95% by weight. [District Rule 4623, 5.3.1], [Federally Enforceable Through Title V]
- 8. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
- 9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

- 15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 16. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
- 17. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
- 18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
- 19. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
- 20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-123-2 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 63,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-124-2 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

ONE 42,000 GALLON FIXED ROOF PETROLEUM STORAGE TANK

- 1. Tank shall vent only to vapor control equipment listed in S-1549-121. [District NSR Rule], [Federally Enforceable Through Title V]
- 2. There shall be no leaks in excess of 10,000 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District Rule 4623, 3.3 and District NSR Rule], [Federally Enforceable Through Title V]
- Permittee shall inspect and maintain fugitive components as specified in S-1549-121. [District NSR Rule], [Federally Enforceable Through Title VI
- 4. Fugitive VOC emission rate shall not exceed that listed in S-1549-121. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. All tank gauging or sampling devices shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except during gauging and sampling. [District Rule 4623, 5.3.2 and District NSR Rule], [Federally Enforceable Through Title V]
- 6. The permittee shall keep accurate records of true vapor pressure, Reid vapor pressure, storage temperature and types of liquids stored for a period of five years and shall make such records available for District inspection upon request. [District Rule 4623 and District NSR Rule], [Federally Enforceable Through Title V]
- 7. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 95% by weight. [District Rule 4623, 5.3.1], [Federally Enforceable Through Title V]
- 8. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
- 9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

- 15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 16. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
- 17. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
- 18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
- 19. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
- 20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-125-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

21,000 GALLON SUMP REPLACEMENT TANK WITH PRESSURE VACUUM VALVE (STAR LEASE)

- 1. Tank shall vent only to vapor control equipment listed in S-1549-121. [District NSR Rule], [Federally Enforceable Through Title V]
- 2. There shall be no leaks in excess of 10,000 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District Rule 4623, 3.3 and District NSR Rule], [Federally Enforceable Through Title V]
- Permittee shall inspect and maintain fugitive components as specified in S-1549-121. [District NSR Rule], [Federally Enforceable Through Title VI
- 4. Fugitive VOC emission rate shall not exceed that listed in S-1549-121. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. All tank gauging or sampling devices shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except during gauging and sampling. [District Rule 4623, 5.3.2 and District NSR Rule], [Federally Enforceable Through Title V]
- 6. The permittee shall keep accurate records of true vapor pressure, Reid vapor pressure, storage temperature and types of liquids stored for a period of five years and shall make such records available for District inspection upon request. [District Rule 4623, 6.1 and District NSR Rule], [Federally Enforceable Through Title V]
- 7. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 95% by weight. [District Rule 4623, 5.3.1], [Federally Enforceable Through Title V]
- 8. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
- 9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

- 15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 16. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
- 17. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
- 18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
- 19. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
- 20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-126-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

84,000 GALLON SUMP REPLACEMENT TANK WITH VAPOR RECOVERY SYSTEM COMMON TO UNIT #S-1549-121. (STAR LEASE)

- 1. Tank shall vent only to vapor control equipment listed in S-1549-121. [District NSR Rule], [Federally Enforceable Through Title V]
- 2. There shall be no leaks in excess of 10,000 ppm when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21. [District Rule 4623, 3.3 and District NSR Rule], [Federally Enforceable Through Title V]
- Permittee shall inspect and maintain fugitive components as specified in S-1549-121. [District NSR Rule], [Federally Enforceable Through Title V]
- 4. Fugitive VOC emission rate shall not exceed that listed in S-1549-121. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. All tank gauging or sampling devices shall be equipped with a gas-tight (as defined in Rule 4623) cover which shall be closed at all times except during gauging and sampling. [District Rule 4623, 5.3.2 and District NSR Rule], [Federally Enforceable Through Title V]
- 6. The permittee shall keep accurate records of true vapor pressure, Reid vapor pressure, storage temperature and types of liquids stored for a period of five years and shall make such records available for District inspection upon request. [District Rule 4623, 6.1 and District NSR Rule], [Federally Enforceable Through Title V]
- 7. The tank shall be equipped with a vapor loss prevention system capable of collecting all VOC emissions and preventing their emissions to the atmosphere at an efficiency of at least 95% by weight. [District Rule 4623, 5.3.1], [Federally Enforceable Through Title V]
- 8. All piping, valves and fittings shall be constructed and maintained in a gas-tight condition. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 5.3.3], [Federally Enforceable Through Title V]
- 9. All piping, fittings, and valves shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. If any of the tank components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If no tank components are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 10. A facility operator, upon detection of a leaking component, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 11. An operator shall reinspect a component for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 12. Emissions from components which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting re-inspection shall not be in violation of this permit. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 13. Any component leak shall be repaired to a leak-free condition or vented to a flare satisfying the requirements of 40 CFR 60.18 or to a vapor control device that is at least 95 percent efficient as measured by EPA Method 25 within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. Any vapor control device, other than a flare, used to comply with this condition shall demonstrate at least 95% control efficiency as measured by EPA Method 25 at least annually. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

- 14. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 15. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 16. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
- 17. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
- 18. Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device. [District Rule 4623, 6.2.4], [Federally Enforceable Through Title V]
- 19. The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b. [District Rule 4623, 6.2.5], [Federally Enforceable Through Title V]
- 20. The operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 21. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-127-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

5880 GALLON BLOWDOWN VESSEL (STAR LEASE)

- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-128-1 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

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- 1. True vapor pressure of any organic liquid introduced to the tank shall not exceed 1.5 psia at liquid temperature. [District Rules 4623, 2.0], [Federally Enforceable Through Title V]
- 2. The operator shall determine the true vapor pressure of the petroleum liquid stored in the tank at least once per year in accordance with methods described in 40 CFR 60.113 and section 6.2 of District Rule 4623 (amended 12/17/92). Determinations shall be made annually during the summer and whenever there is a change in the source or type of petroleum entering the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. The operator shall keep accurate records of types, storage temperature, and TVP of liquids stored to verify continued exemption from District Rule 4623 (amended 12/17/92). [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. As used in this permit, the term "source or type of petroleum" shall mean petroleum liquids with similar characteristics. The operator shall maintain records of the API gravity of petroleum liquids stored in this unit to determine which oils are from a common source. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-1549-129-3 **EXPIRATION DATE:** 05/31/2005

EQUIPMENT DECRIPTION:

62.5 MMBTU/HR STEAM GENERATOR EQUIPPED WITH 02 CONTROLLER AND FLUE GAS RECIRCULATION.

- 1. Emissions shall not exceed any of the following: PM10: 0.005 lb/MMBtu, SOx (as SO2): 0.0006 lb/MMBtu, NOx (as NO2): 0.036 lb/MMBtu or 30 ppmv at 3% O2, VOC: 0.0024 lb/MMBtu, or CO: 0.037 lb/MMBtu. [District Rules NSR & 4305], [Federally Enforceable Through Title V]
- 2. Source testing for NOx and CO emissions and fuel gas sulfur content shall be conducted within 60 days of startup, and not less than once every 12 months, except as provided below. [District Rules 4305, 4351, and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 3. Source testing for NOx and CO emissions shall be conducted not less than once every 36 months if compliance is demonstrated on two consecutive annual tests. [District Rules 4305, 4351 and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. If permittee fails to meet NOx and CO emission limits when testing not less than once every 36 months, compliance with NOx and CO emission limits shall be demonstrated not less than once every 12 months. [District Rules 4305, 4351 and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 5. Source test results from an individual unit that is identical to this unit, in terms of rated capacity, operational conditions, fuel used, and control method, as approved by the APCO, will satisfy the NOx and CO source testing requirement. [District Rules 4305, 4351 and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 6. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081], [Federally Enforceable Through Title V]
- 7. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081], [Federally Enforceable Through Title V]
- 8. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081], [Federally Enforceable Through Title V]
- 9. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, NOx (lb/MMBtu) EPA Method 19, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and fuel gas sulfur content ASTM D3246 or double GC for H2S and mercaptans. [District Rules 1081, 4305, 4351 and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 10. The sample collection shall be conducted under conditions (fuel quality, firing rate, air fuel ratio, etc.) expected to result in emissions representative of normal operation. [District Rule 1081], [Federally Enforceable Through Title V]
- 11. The operational conditions during compliance testing may be imposed as permit requirements. [District Rule 2080], [Federally Enforceable Through Title V]
- 12. The stack concentration of NOx (as NO2), CO, and O2 shall be measured at least on a monthly basis using District approved portable analyzers. [District Rule 4305, and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 13. The permittee shall maintain records of the date and time of NOx, CO, and O2 measurements, the measured NO2 and CO concentrations corrected to 3% O2, and the O2 concentration. The records shall also include a description of any corrective action taken to maintain the emissions in the acceptable range. These records shall be retained at the facility for a period of no less than two years and shall be made readily available for District inspection upon request. [District Rules 1070 4305 and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 14. If the NOx or CO concentrations, as measured by the portable analyzer, exceed the permitted emission limits, the permittee or third party shall notify the District and return the NOx and CO concentrations to the permitted emission limits as soon as possible but no longer than one (1) hour after detection. If the portable analyzer readings continue to exceed the permitted emission limits after (1) hour, the permittee shall conduct a source test within 60 days, of the first exceedance to demonstrate compliance with the permitted emission limits. [District Rule 4305 and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 15. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (Amended December 16, 1993). [District Rule 1081 and Kern County Rules 108.1], [Federally Enforceable Through Title V]

- 16. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 17. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
- 18. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
- 19. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. Compliance with this requirement may be demonstrated by firing the unit only on PUC or FERC regulated natural gas; or by testing the sulfur content of each fuel and determining the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit; or by source testing in combination with fuel analysis. [District Rules 2520, 9.4.2 and 4301, 5.2.1], [Federally Enforceable Through Title V]
- 20. When complying with sulfur emission limits by fuel analysis or by a combination of source testing and fuel analysis, each fuel source shall be tested weekly for sulfur content and higher heating value. If compliance with the fuel sulfur content limit and sulfur emission limits has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be semi-annually. If a semi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 21. When complying with SOx emission limits by testing of stack emissions, testing shall be performed not less than once every 12 months using EPA Method 6B; or Method 8; or, for units using gaseous fuel scrubbed for sulfur pre-combustion, a grab sample analysis by GC-FPD/TCD performed in the laboratory and EPA Method 19 to calculated emissions. Gaseous fuel fired units demonstrating compliance on two consecutive annual source tests shall be tested not less than once every thirty-six months; however, annual source testing shall resume if any test fails to show compliance. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 22. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 23. If fuel analysis is used to demonstrate compliance with the conditions of this permit, the fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240 or D 2382 for liquid hydrocarbon fuels; ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1], [Federally Enforceable Through Title V]
- 24. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. To demonstrate compliance with this requirement the operator shall do one of the following: fire the unit only on PUC or FERC regulated natural gas; or test the sulfur content of each fuel source and demonstrate the sulfur content does not exceed 3.3% by weight for gaseous fuels; or determine that the concentration of sulfur compounds in the exhaust does not exceed the concentration limit by a combination of source testing and fuel analysis. [District Rule 2520, 9.4.2, District Rule 4801, and Kern County Rule 407], [Federally Enforceable Through Title V]
- 25. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. [District Rules 4301, 5.2.2 and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 26. Emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (amended 12/16/93), of three 40-minute test runs for NOx and CO. This mean shall be multiplied by the appropriate factor. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]